1-01-01

(Keni Dr

BRIEFING MEMORANGUM
Shell Chamical Company
Washington, O.C. 20006

July 19132

JUN 29 1973

Pesticide Patition No. 1F1132--Amend & 180.235--Vapona

DEPUTY ASSISTANT ADMIRISTRATOR FOR PESTICIDES PROGRAMS

Shell Chemical Company advised us by latter June 8, 1972, that the following paragraph of \$ 180.235, establishing tolerances for residues of Vapona, is ambiguous: "0.5 part per million from post-harvest application in or on nonperishable bulk stored raw agricultural commodities and in or on nonperishable packaged or bagged

raw agricultural commodities that contain 6 percent fat or less".

They question whether or not bulk stored raw agricultural cossodities containing more than 5% fat are covered. The regulation was meant to cover such cosmodities and we therefore recommend the attached rewording of the paragraph be sublished.

Peter Chichilo Petitious Control Officer

APPROVEO:

Drew M. Beker, Jr., Chief Petitions Control Branch F. J. McFarland, Director Pesticidos Tolerances Division

cc: PRD/EPA
PTD
Chemistry Branch
Toxicology Branch
Hr. Ramsey/FDA

Mr. Gross

PChichilo:ar 6-27-72, 6-26-72 R/D Init: DMBaker 6-26-72 JUH 29 INTE

June 21, 1972

PP #IF1132. DDVP on non-perishable bulk stored raw agricultural commodities. Letter of June 8, 1872.
Petitions Control Branch and Toxicology Branch

The Shell Chemical Company by its letter of 6/8/72 is requesting clarification of that part of the regulation (Sec. 180.235) for the tolerance of 0.5 ppm for residues of DDVP on non-perishable bulk stored r.a.c's which states that these commodities must contain 6% fat or less. It was the petitioner's intent to have the tolerance cover the commodities regardless of fat content.

In our evaluation of PP #171132 (8/17/71), we stated that studies on bulk commodities with more than 6% fat content showed that anhigher tolerance was not needed. In contrast, the packaged non-perishable commodities of more than 6% fat need a higher (2 ppm) tolerance.

Since the regulation as published does not reflect the intent of our original evaluation, we believe the regulation should be re-written as suggested by the petitioner, e.g.,: "0.5 ppm from postharvest application in or on non-perishable packaged or bagged raw agricultural commodities that contain 6% fatior less, and in or on non-perishable bulk stored raw agricultural commodities, regardless of fat content."

Andrew R. Rathman Chemistry Branch Pesticides Tolerances Division

cc:
Toxicology Branch
Chemistry Branch
RO-130 (FDA)
C. Smith (PRD)
PP #1F1132

ARRathman 6/21/72 RD/init: IGCummings 6/16/72 SHELL CHEMICAL COMPANY



AGRICULTURAL DIVISION

A DIVISION OF SHELL OIL COMPANY

SUITE 300

1700 K STREET, N.W.

WASHINGTON, D.C. 20006

June 8, 1972

PP 1F1132 - TITLE 40 - \$180.235 (B Comment 2, 2-DICHLOROVINYL DIMETHYL PHOSPHATE;

TOLERANCES FOR RESIDUES

Buch O Quick Rathman

T-ELEPHONE 702 - 296-363

Mr. Drew M. Baker Pesticides Tolerances Division Environmental Protection Agency South Agricultural Building 12th and C Streets, S. W. Washington, D. C. 20250

Dear Mr. Baker:

You may recall a telephone conversation we had sometime back concerning the subject regulation and the impression we had in reading it, that it did not cover bulk stored raw agricultural commodities that had more than 6% fat (see below).

"0.5 part per million from postharvest application in or on nonperishable bulk stored raw agricultural commodities and in or on nonperishable packaged or bagged raw agricultural commodities that contain 6 percent fat or less."

You assured us that the regulation did cover all bulk stored raw agricultural commodities including those over 6% fat.

However, we are now being asked the same question we asked of you, as the regulation receives wider distribution. We are concerned for the future when the use label is registered that many similar questions will be raised. To preclude this, may we suggest alternative arrangement of the language which should solve the problem. If the regulation was written as follows:

"0.5 ppm from postharvest application in or on nonperishable packaged or bagged raw agricultural commodities that contain 6 percent fat or less and in or on nonperishable bulk stored raw agricultural commodities, regardless of fat content."

it would cover all bulk stored commodities as intended including products such as peanuts, the product of current concern.

JUN 14 1972

We would certainly appreciate any assistance you can provide us in resolving this problem.

Very truly yours,

E. L. Hobson, Ph.D.
Division Representative

Questus

Was it our intention in setting the original tolerance that commodities containing > 6% fat should not be treated—regardless of whethe bulk stored or packaged?

Thursday ("many 27,1972

# Title 40—PROTECTION OF ENVIRONMENT

Chapter I—Environmental Protection
Agency

SUBCHAPTER E-PESTICIDES PROGRAMS

PART 180-TOLERANCES AND EX-EMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COM-MODITIES

#### 2,2-Dichlorovinyi Dimethyl Phosphate

A petition (PP 1F1132) was filed by Shell Chemical Co., Division of Shell Oil Co., Suite 1103, 1700 K Street NW., Washington, DC 20006, in accordance with provisions of the Federal Food, Drug, and Cosmetic Act as amended (21 U.S.C. 346a), proposing establishment of a tolerance for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate in or on nonperishable bulk stored raw agricultural commodities at 0.5 part per million resulting from dispersion of the insecticide from resin strips used in bulk storage areas.

Part 120, Chapter I, Title 21 was redesignated Part 420 and transferred to Chapter III (36 F.R. 424). Subsequently, Part 420, Chapter III, Title 21 was redesignated Part 180 and transferred to Subchapter E, Chapter I, Title 40 (36 F.R. 27280).

Based on consideration given data submitted in the petition and other relevant material, it is concluded that:

- 1. The pesticide is useful for the purpose for which the tolerance is being established.
- 2. The proposed usage is not reasonably expected to result in residues of the pesticide in eggs, meat, milk, and poultry. The usage is classified in the category specified in § 180.6(a) (3).
- 3. The tolerance established by this order will protect the public health.

Therefore, pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2)), the authority transferred to the Administrator of the Environmental Protection Agency (35 F.R. 15623), and the authority delegated by the Administrator to the Deputy Assistant Administrator for Pesticides Programs (36 F.R. 9038), § 180.235 is amended by revising the paragraph "0.5 part per million from postharvest \* \* \*", as follows:

- § 180.235 2,2-Dichlorovinyl dimethyl phosphate; tolerances for residues.
- 0.5 part per million from postharvest application in or on nonperishable bulk

stored raw agricultural commodities and in or on nonperishable packaged or bagged raw agricultural commodities that contain 6 percent fat or less.

Any person who will be adversely affected by the foregoing order may at any time within 30 days after its date of publication in the FEDERAL REGISTER file with the Objections Clerk, Environmental Protection Agency, Room 3175, South Agriculture Building, 12th Street and Independence Avenue SW., Washington, DC 20460, written objections thereto in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

Effective date. This order shall become effective on its date of publication in the Federal Register (1-27-72).

(Sec. 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a (d)(2))

Dated: January 18, 1972.

WILLIAM M. UPHOLT,
Deputy Assistant Administrator
for Pesticides Programs.

[FR Doc.72-1196 Filed 1-26-72;8:48 am]

Lemesty Branch

JAN 14 1972

ERIEFING MEMORANDUM Shell Chemical Company Washington, D. C. 20006

Lik: Pp# 1F1132

Pesticide Petition No. 1F1132--Amend § 180.235--Vapons

DEPUTY ASSISTANT ADMINISTRATOR FOR PESTICIDES PROGRAMS

1. Vapona is Shell Chemical Company's trade name for the insecticide 2,2-dichlorovinyl dimethyl phosphate. Tolerances have been established for residues of Vapona at 2 p.p.m. from postharvest application to non-perishable packaged or begged raw agricultural commodities that contain more than 6 percent fat; 1 p.p.m. (expressed as naled) in or on lettuce; at 0.5 p.p.m. (expressed as naled) in or on mushrooms, cucumbers, radishes, and tomatoes from preharvest and postharvest application; 0.5 p.p.m. from postharvest application to nonperishable packaged or bagged raw agricultural commodities that contain 6 percent fat or less; 0.05 p.p.m. (negligible residue) in eggs and meet, fat, and meat by-products of poultry; and 0.02 p.p.m. (negligible residue) in meat, fat, and meat byproducts of cattle, goats, horses, and sheep and in milk.

A tolerance of 0.1 p.p.m. prescribed by § 135g.75 for negligible residues of Vapona in the edible tissues of swine covers both its use as an anthelmintic in swine feed and as an insecticide applied directly to swine.

Shell submitted this petition proposing the establishment of a telerance for residues in or on nonperishable bulk stored raw agricultural commodities at 0.5 part per million resulting from dispersion of the insecticide from resin strips used in bulk storage areas.

- 2. The Pesticides Regulation Division has certified that the pesticide is useful for the purpose for which the tolerance is proposed.
- 3. The Chemistry Branch concludes:
  - a. The terminal residues are adequately identified.
  - b. Adequate analytical methods are available for enforcement of the proposed tolerance.

JAK T T -

# Page 2 - Deputy Assistant Administrator for Pasticides Programs

- c. Residues from the proposed use are not expected to exceed the proposed tolerance.
- d. The proposed usage is classified in the category specified in § 180.6(a)(3) with respect to meat, milk, poultry, and eggs.
- 4. The Toxicology Branch finds that the proposed tolerance is safe and that it will protect the public health.
- 5. We recommend that the attached order be signed and published.

William H. Morgan Petitions Control Officer

APPROVED:

e tres

Drew H. Baker, Jr., Chief Petitions Control Branch F.J. McFerland, Director Pesticides Tolerances Division

cc:
PRD, EPA
PTD
Chemistry Branch
Toxicology Branch
LLRamsey, FDA, BF-301
EGross

WHMorgan:ea 1/10/72:ggr 12/10/72 R/D Init:GJBeusch 12/21/71 JGCummings 12/22/71 CHWilliams 12/29/71 DMBaker FJMcFarland

December 15, 1971

PP #1F1132. DDVP on non-perishable raw agricultural commodities. Amendment of September 21, 1971.

Petitions Control Branch and Toxicology Branch

The petitioner in this amendment has revised his label to add the word bulk" to the designation: "Non-perishable bulk stored raw agricultural commodities". Examples of such commodities (soybeans, corn, wheat, cocoabbeans and peanuts) were carried over from the previous label of June 16, 1971.

Therefore, Toxicology Branch, considerations permitting, we now recommend that the proposed tolerance of 0.5 ppm be established for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate (DDVP) from postharvest application to non-perishable bulk stored raw agricultural commodities. The term "non-perishable bulk stored raw agricultural commodities," refers to the storage in bulk quantities of "non-perishable raw agricultural commodities" as defined in 21 CFR 180.1(m).

George J. Beusch Chemistry Branch Pesticides Tolemaces Division

cc:
Tox. Br.
Chem. Br.
CF-30 (FDA)
C. Smith (PRD)
PP #1F1132

GJBesuch:mae 12/15/71 RD/init:JGCummings 12/15/71

hlow/1F1132

consider as re

on 9-94-7/ (1

90 days: 13-

45 days: 11=

at PRD's

THERRONE 205 296



AGRICULTURAL DIVISION

## SHELL CHEMICAL COMPAN

A DIVISION OF SHELL OIL COMPANY

SUITE 300

1700 K STREET, N.W.

WASHINGTON, D.C. 20006

September 21, 1971

PESTICIDE PETITION NO. 1F1132 PROPOSING TOLERANCES FOR 2.2-DICHLOROVINYL DIMETHYL PHOSPHATE IN OR ON NONPERISHABLE BULK STORED

RAW AGRICULTURAL COMMODITIES

Environmental Protection Agency Pesticides Tolerances Division Washington, D. C. 20250

Attention Mr. Drew M. Baker, Jr., Chief Patitions Control Branch

Gentlemen:

With reference to your letter of September 13 and our discussion on September 20, we have decided to add the "bulk" designation to the label in the subject petition now rather than defer this action until PRD reviews the label for registration purposes. Attached is a revised copy of the label previously submitted with our letter of September 2. The only revision appearing on this label is the addition of the word "bulk" on page 2.

Yours very truly,

EciAns. E. L. Hobson

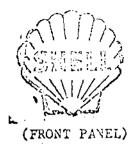
Division Representative

Attachment

cc w/att. - Pesticides Regulation Division, EPA

Ric S. Chan Br. 12/10/ Rec'd PTD. EP. Dea 2,1971

CELL CHEMICAL COMPANY
Division of Shell Oil Company
pricultural Division



### VAPONA(R) INSECTICIDE PEST STRIP

UTION! KEEP OUT OF REACH OF CHILDREN ... (See other cautions on back panel).

NOT OPEN UNTIL READY FOR USE.

TIVE INGREDIENTS

2,2-dichlorovinyl dimethyl phosphate
Related Compounds
ERT INGREDIENTS

quivalent to 20.0% VAPONA(R) Insecticide

DA Reg. No. 201-136

IMAL HEALTH PRODUCT

PERCENT BY WEIGHT 18.6\*

1.4\* 80.0

TOTAL 100.0

Min. Net. Wet. 3.7 oz.

(BACK PANEL)

VAPONA(R) Insecticide Pest Strip.

CAUTION! KEEP OUT OF REACH OF CHILDREN.

not get in mouth; harmful if swallowed. After prolonged storage, a small amount liquid may form on the strip. Do not get liquid in eyes. Wash hands thoroughly th soap and water after handling strip. Do not use in nurseries or rooms where fants, ill or aged persons are confined. Do not use in kitchens, restaurants or eas where food is prepared or served.

#### GENERAL DIRECTIONS

PONA Insecticide Pest Strip ( $10^{\prime\prime\prime}$  x  $25^{\prime\prime\prime}$  unit) is a specially prepared insecticidal smulation for use in the control of resistant and non-resistant insects.

#### USE AND DIRECTIONS FOR APPLICATION

INAL BUILDINGS: For the control of flies, gnats and mosquitoes in animal buildings orse barns, diary barns, calf barns, shelter sheds, milk sheds, stables, pig rlors, poultry houses and dog kennels), and other farm buildings, apply one strip r 1,000 cubic feet of enclosed area. Weather and other conditions such as extreme nutilation or strong drafts may alter the performance of the strip, but this treatint is usually effective for one season. Replace strips if effectiveness diminishes.

The control of flies, grats, mosquitoes and other small flying insects, defined the reduction of silverfish in houses and other suspend one strip in an erage size room (10' x 10' x 10'). Weather and other conditions such as extreme intilation or strong drafts may alter the performance of the strip, but this reatment is usually effective for three months. Replace strip if effectiveness iminishes.

BULK
ON-PERISHABLE STORED RAW AGRICULTURAL COMMODITIES (including soybeans, corn, wheat, paces beans and peanuts): For the control of stored-product moths (including Indian cal moths, almond meths, and warehouse or cocoa moths) infesting non-perishable tored raw agricultural commodities, suspend one strip per 1,000 cu. ft. of air space ver the commodity before moths begin to emerge in early spring. Weather and other onditions such as extreme ventilation or strong drafts may alter the performance of he strip, but this treatment is usually effective for three months. Replace strips amediately when effectiveness diminishes to prevent egg laying and growth of larvae.

AREAGE CANS: For the control of flies in garbage cans, attach one strip inside verage-sized garbage can (20 gallon capacity). One unit will be effective for an attire fly season. Keep lid on garbage can.

ATGI BASINS: For the control of mosquitoes breeding in catch basins, suspend one trip approximately 10 inches above the water line in each basin. Each unit should live effective control for ten to fifteen weeks. Replace strip when effectiveness diminishes.

DEWER SYSTEMS: As an aid in the reduction of roaches in sewer lateral systems, suspend one strip to within two feet of the bottom of the manhole. One unit should be effective for one to two months. Replace strip when effectiveness diminishes.

Use of the packaged product is licensed under Shell's U. S. Patents 2,956,073, 3,116,201 and 3,318,769 for use as an insecticide generator only. Not to be taken internally by humans or animals.

#### DISCLAIMER OF WARRANTY

THIS PRODUCT IS SUPPLIED WITHOUT WARRANTY (EXPRESS OR IMPLIED) OF FITNESS, QUALITY, MERCHANTABILITY OR OTHERWISE.

Len 9/21/

DDVP on nonperishable bulk stored raw agricultural cosmodities

Mr. Brew M. Baker, Chief Petitions Control Branch Pasticides Tolerances Division Little J. 1971

Little J. 1971

Little J. 1971

Little J. 1971

PP Ro. 1F1132 - Residue tolerance request of 0.5 ppm DDVP on nonperishable, bulk stored, raw agricultural commodities.

DDVP toxicity data supporting the safety of established residue tolerances on bagged raw agricultural commodities is summarized in Pesticide Petition 706, memorandum 30 April, 1968. These tolerances are 2 ppm on commodities that contain more than 6% fat and 0.5 ppm on commodities that contain less than 5% fat.

Available DDVP toxicity data have been judged to support the safety of other tolerances as listed in paragraph 120.235.

The Chemistry Branch's residue evaluation of this petition (17 Aug., 1971 memorandum) details residue analysis for DDVP at various depths in the stored bulk commodities. They say, that the proposed tolerance would never be exceeded in the top 4 inches of the commodity with virtually no residues found below 6 inches. Any mixing of the residue bearing top 4 inches of the bulk stored commodity with lower layers would of course reduce available DDVP residues by dilution. Processing, after storage, would further reduce the small residues that might be present (discussed in the Chemistry residue evaluation memorandum Sept., 18, 1967 for Pesticide Petition 706).

The Chemistry Branch's 17 Aug., 1971 memorandum also states that if the bulk stored raw agricultural commodities were bagged the established DDVP tolerances would not be exceeded.

It is apparent that little, if any, additional DDVP will be added to the calculated safe intake by the establishment of the requested residue tolerance of this petition.

#### Conclusion

Available DDVP toxicity data supports the safety of the requested residue tolerances of this petition.

Section Chief Toxicology Branch/PTD -

George E. Writmore, DVH co: JaCummings Perrine Br. Div. Rd. Fl. PRD/EPA Atlanta Br. Br. Rd. Fl. PP No. 1F1132 GENETIT More/ccw 12/10/71

November 2, 1971

PP #IF1132. DDVP on nonperishable raw agricultural commodities. Letter dated 9/2/71.

Petitions Control Branch and Toxicology Branch

In the CB (A. Rathman) evaluation dated 8/17/71 we stated that our faborable recommendation was contingent upon the following label changes:

- 1. The addition of the word "bulk" (nonperishable bulk stored ——) and
- 2. The addition of examples of the commodities to be treated.

PRD, EPA also requested item 2, above and has indicated that other changes such as indicating the insects to be controlled will be needed.

By the subject letter, the petitioner states that he is willing to make the label revisions requested by us. However, he wishes to defer making the changes until he receives the final comments of PRD.

The petitioner should be advised that his proposed label revisions appear to be adequate. However, our final recommendation will be deferred until we receive copies of the new labels.

J. Wolff Chemistry Branch Pesticides Tolerances Division

cc: CF-30 (FDA) C. Smith (PRD) Tox. Br. Chem. Br. Dr. Glasgow PP #1F1132

JWolff:mae 11/2/71 RD/init:JGCummings 11/1/71

Chimisty Branch

September 13, 1971

Pesticide Petition No. 1F1132

Mr. L. E. Mitchell Shell Chemical Company 1700 K Street, N.W. Suite 1103 Washington, D. C. 20006

Dear Mr. Mitchell:

This refers to Pesticide Petition No. 1F1132 requesting establishment of tolerances for residues of 2,2-dichlorovinyl dimethyl phosphate in or on nonperishable bulk stored raw agricultural commodities.

We have your letter of September 2, 1971, and note that you have no objection to adding the word "bulk" to the labels.

Further action awaits completion of review.

Sincerely yours,

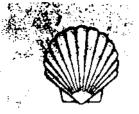
Drew M. Baker, Jr., Chief Petitions Control Branch

PRD, EPA

PTD Chemistry Branch Toxicology Branch OGFitzhugh

DMBaker:ea 9/13/71

SEP 1 5 1971



ACCOMPANIES PARTICIPA

## SHEL CHEMICAL COMPANY

A DIVISION OF SHELL OIL COMPANY

SUITE 300

1700 K STREET, N.W.

WASHINGTON, D.C. 20006

September 2, 1971

650 DAY 10/25/71

PRITICISE PRITITION NO. 1F1132

Mr. Peter Chichilo
Petitions Control Officer
Petitions Control Branch
Pesticides Tolerances Division
Environmental Protection Agency
Washington, B. C. 20250

Bear Mr. Chichilo:

Please refer to your letter of August 26 informing us that our petition for dichlorvos tolerances (1F1132) cannot be approved or further considered until the label is changed to indicate that the use applies to bulk non-perishable stored raw agricultural commodities. A similar comment was made by PRD in their letter of April 26, 1971, transmitting to us a copy of their Certification of Usefulness.

We answered PRD's letter of April 26 on June 16, 1971, and sent them a revised label containing the changes you have requested in your August 26 letter, with the exception that we did not specify bulk commodities. A copy of our June 16 letter was sent to the Pesticides Tolerances Division, but we are enclosing another copy along with a copy of the revised label for your information. Also, a copy of PRD's letter of April 26 is attached.

We have no objection to adding the word "bulk" to the label as you require, but since PRB has not completed their review of the label and may require additional changes on the label before accepting it for registration, we would like to defer making this change until we receive their final comments. We trust this is agreeable with you and that you can proceed with the processing of the petition without further delay.

Yours very truly

L. B. Mitchell

Division Representative

Enclosures

cc: Pesticides Regulation Biv. / KPA, Wash., D.C.

APR 2 7 1971

Pesticides Regulation Division

APR 2 6 1971

Vapora/ Bulk commodition

CERTIFIED MAIL

Mr. L. E. Mitchell Shell Chemical Company 1700 K Street, N. W. Washington, D. C. 20006

Dear Mr. Mitchell:

We have examined Pesticide Patition 171132 and are enclosing a copy of our certification of neefulness.

Prior to registration the following comments must be resolved:

- 1. The stored raw agricultural commodities and the insects to be controlled must be named on the label.
- 2. The claim for "reduction of silverfish in bouses" should be revised to read, "reduction of silverfish in storage closets."

Sincerely,

Charles L. Smith Head, Petitions Control Section

Esciosure

Pesticides Regulation Division

APR 2 8 1971

9-PP-1F1132

Certification of Usefulness Posticide Petition 191132 Drew M. Baker, Jr. BY-120

We have examined the subject patition and related data proposing a tolerance for the posticide chemical 2,2-dichlorovinyl dimethyl phosphate of 0.5 part per million in nonperishable bulk stored was agricultural commodities. This patition was submitted by Shell Chemical Company, and was filed February 11, 1971.

We certify that the posticide chemical is useful for the purpose for which a tolerance is sought on the above cosmodities.

Charles L. Smith Head, Petitions Control Section



### SHELL CHEMICAL COMPANY

A DIVISIÓN OF SHELL OIL COMPANY

SUITE 1103

1700 K STREET, N.W.

WASHINGTON, D.C. 20006

June 16, 1971

AGRICULTURAL CHEMICALS DIVISION

PESTICIDE PETITION 1F1132

Mr. Charles L. Smith, Head Petitions Control Section Environmental Protection Agency Pesticides Regulation Division South Agricultural Building - Rm. 2128 Washington, D. C. 20250

Dear Mr. Smith:

We are writing in answer to your letter of April 26, 1971, which commented on deficiencies found in the labels included in Pesticide Petition No. 1F1132. In answer to your coments we have taken the following action:

Comment 1: We have added lists of both the stored raw agricultural commodities and the insects to be controlled to the appropriate section of th label. We would like to point out, however, that these lists are included as examples only and are not all-inclusive. We implicitly include all nonperish raw agricultural commodities which fall under the definition of the term in the Code of Federal Regulations 1970 edition, Title 21, Section 120.1(m). We quote:

"The term 'nonperishable raw agricultural commodity' means any raw agricultural commodity not subject to rapid decay or deterioration that would render it unfit for consumption. Examples are cocoa beans, coffee beans, field dried beans, field dried peas, grains and nuts. Not included are eggs, milk, meat, poultry, fresh fruits, and vegetables such as onions, parsnips, potatoes and carrots."

As you can see, it is neither necessary nor practical to list each and every product which may be treated. We trust you will concur.

As you know, the performance data contained in the subject petition supports use of the product to control several species of moths not included on the enclosed revised labels. We have listed only the most economically important insects found in the United States on the label, but do not wish to imply by this that the product is ineffective against other types of stored grain moths (e.g., Mediterranean Flour moth and raisin moth).

R

TELEPHONE 207. 294.3

Comment 2: The claim for "reduction of silverfish in houses" appears on several labels which are fully registered under USDA Registration Number 201-136. The claim of "reduction of silverfish in storage closets" appears on our fully registered NO-PEST Ministrip label, USDA Registration Number 201-185. We hesitate to change the claim on the enclosed labels for this reason, and also because our full-size strip should not be hung in areas whose total volume is less than 1000 cubis feet (such as storage closets). Your comments on this matter would be appreciated.

Enclosed are two labels for our VAPONA strip which are registered under USDA Registration Number 201-136. One of these labels is identical to the one in PP No. 1F1132; the other differs only as shown below (both are registered under 201-136):

- VAPONA® Insecticide Pest Strip, USDA Reg. No. 201-136, including directions for Animal Buildings and revised as mentioned above.
- VAPONA® Insecticide Pest Strip, USDA Reg. No. 201-136, without directions for Animal Buildings and revised as mentioned above.

We hope these changes on the labels will overcome the deficiencies mentioned in your April 26 letter. Since no new data are being submitted and no significant changes are being made in the use directions, we trust that the review of the petition can continue without interruption.

Very truly yours,

SHELL CHEMICAL COMPANY

L. E. Mitchell

Division Representative

Enclosures

cc: Pesticide Tolerance Division Environmental Protection Agency

bc: San Ramon - Ag. Div. - Information Services (2)

- Regulatory Affairs - Manager

- PRD - Manager

- Labels & Petitions - Supervisor

- H & N - Commercial Development - Manager

- Consumer / Specialty Products - Manager

Modesto - BSRC - PDD - Manager

Atlanta - Ag. Div. - EMR - Tech. Support - Consumer Products - Manager

SHELL CHEMICAL COMPANY
A.Division of Shell Oil Company
Agricultural Division



# VAPONA(R) INSECTICIDE PEST STRIP

CAUTION! KEEP OUT OF REACH OF CHILDREN. (See other cautions on back panel).

DO NOT OPEN UNTIL READY FOR USE.

ACTIVE INGREDIENTS
2,2-dichlorovinyl dimethyl phosphate
Related Compounds
INERT INGREDIENTS

PERCENT BY WEIGHT
18.6\*
1.4\*
80.0
TOTAL 100.0

\*Equivalent to 20.0% VAPONA(R) Insecticide

USDA Reg. No. 201-136

ANIMAL HEALTH PRODUCT

Min. Net. Wet. 3.7 oz.

(BACK PANEL)

VAPONA(R) Insecticide Pest Strip

CAUTION! KEEP OUT OF REACH OF CHILDREN.

Do not get in mouth; harmful if swallowed. After prolonged storage, a small amount of liquid may form on the strip. Do not get liquid in eyes. Wash hands thoroughly with soap and water after handling strip. Do not use in nurseries or rooms where infants, ill or aged persons are confined. Do not use in kitchens, restaurants or areas where food is prepared or served.

Page 1 of 2

#### GENERAL DIRECTIONS

VAPONA Insecticide Pest Strip ( $10^{\circ\prime\prime} \times 2\frac{1}{2}^{\circ\prime\prime}$  unit) is a specially prepared insecticidal formulation for use in the control of resistant and non-resistant insects.

#### USE AND DIRECTIONS FOR APPLICATION

ANIMAL BUILDINGS: For the control of flies, gnats and mosquitoes in animal buildings (horse barns, diary barns, sealf barns, shelter sheds, milk sheds, stables, pig parlors, poultry houses and dog kennels), and other farm buildings, apply one strip per 1,000 cubic feet of enclosed area. Weather and other conditions such as extreme ventilation or strong drafts may alter the performance of the strip, but this treatment is usually effective for one season. Replace strips if effectiveness diminishes

HOMES: For the control of flies, gnats, mosquitoes and other small flying insects, and the reduction of silverfish in houses , suspend one strip in an everage size room ( $10^{\circ} \times 10^{\circ} \times 10^{\circ}$ ). Weather and other conditions such as extreme ventilation or strong drafts may alter the performance of the strip, but this treatment is usually effective for three months. Replace strip if effectiveness diminishes.

NON-PERISHABLE STORED RAW AGRICULTURAL COMMODITIES (including soybeans, corn, wheat, cocoa beans and peanuts): For the control of stored-product moths (including Indian meal moths, almond moths, and warehouse or cocoa moths) infesting non-perishable stored raw agricultural commodities, suspend one strip per 1,000 cu. ft. of air space over the commodity before moths begin to emerge in early spring. Weather and other conditions such as extreme ventilation or strong drafts may alter the performance of the strip, but this treatment is usually effective for three months. Replace strips immediately when effectiveness diminishes to prevent egg laying and growth of larvae.

GARLAGE CANS: For the control of flies in garbage cans, attach one strip inside average-sized garbage can (20 gallon capacity). One unit will be effective for an entire fly season. Keep lid on garbage can.

CATCH BASINS: For the control of mosquitoes breeding in catch basins, suspend one strip approximately 10 inches above the water line in each basin. Each unit should give effective control for ten to fifteen weeks. Replace strip when effectiveness diminishes.

SEWER SYSTEMS: As an aid in the reduction of roaches in sewer lateral systems, suspend one strip to within two feet of the bottom of the manhole. One unit should be effective for one to two months. Replace strip when effectiveness diminishes.

Use of the packaged product is licensed under Shell's U. S. Patents 2,956,073, 3,116,201 and 3,318,769 for use as an insecticide generator only. Not to be taken internally by humans or animals.

#### DISCLAIMER OF WARRANTY

THIS PRODUCT IS SUPPLIED WITHOUT WARRANTY (EXPRESS OR IMPLIED) OF FITNESS, QUALITY, MERCHANTABILITY OR OTHERWISE.

Page 2 of 2.

# ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C. 20250

Pesticides Tolerances Division

August 26, 1971

Pesticide Petition No. 1F1132

Mr. L. E. Mitchell Shell Chemical Company 1700 K Street, N.W. Suite 1103 Washington, D. C. 20006

Dear Mr. Mitchell:

This refers to Pesticide Petition No. 1F1132 requesting establishment of tolerances for residues of 2,2-dichlorovinyl dimethyl phosphate in or on nonperishable bulk stored raw agricultural commodities.

We have completed our chemical review of the petition and find that we cannot approve the request. For further consideration of the proposed tolerances, Section B of the petition should be revised so that the term "nonperishable bulk stored . . ." appears on the label. Also, the term "non-perishable bulk stored raw agricultural commodities" should be clarified by listing examples of such commodities on the label.

Sincerely yours,

Peter Chichilo

Petitions Control Officer Petitions Control Branch

Pesticides Tolerances Division

cc:

PRD, EPA

September 13, 1971

Pesticide Petition No. 1F1132

Mr. L. E. Hitchell
Shell Chemical Comments

Mr. L. E. Mitchell Shell Chemical Company 1700 K Street, N.W. Suite 1103 Washington, D. C. 20006

Dear Mr. Mitchell:

This refers to Pesticide Petition Ho. 171132 requesting establishment of tolerances for residues of 2,2-dichlorovinyl dimethyl phosphate in or on manperishable bulk stored raw agricultural commodities.

We have your letter of September 2, 1971, and note that you have no objection to adding the word "bulk" to the labels.

Further action awaits completion of review.

Sincerely yours,

Drew M. Baker, Jr., Chief Petitions Control Branch

CC: PRD, EPA

PTD Chemistry Branch Toxicology Branch OGFitzhugh

DMBaker:ea 9/13/71

1 cology Buch August 26, 1971 Posticide Petition No. 1F1132 Mr. L. R. Mitchell Shell Chemical Company 1700 K Street Suite 1103 Washington, D. C. 20006 Dear Mr. Mitchell: This refers to Posticide Petition No. 1F1132 requesting establishment of tolerances for residues of 2,2-dichlorovinyl dimethyl phosphate in or on nonperishable bulk stored raw agricultural commodities. We have completed our chemical review of the petition and find that we cannot approve the request. For further consideration of the proposed tolerances, Section B of the petition should be revised so that the term "nonperishable bulk stored . . . " appears on the label. Also, the term "non-perishable bulk stored rew agricultural commodities" should be clarified by listing examples of such commodities on the label. Sincerely yours,

Peter Chichilo
Petitions Control Officer
Petitions Control Branch
Pesticides Tolerances Division

CC: PRD, KPA

PTD Chemistry Branch Toxicology Branch OGFitzhugh

PChichilo:ea 8/26/71:1a 8/23/71 R/D Init:DMBaker 8/24/71

PF #1F1132. DDVP on nonperishable bulk stored raw agricultural commodities. Evaluation of analytical methods and residue data.

Petitions Control Branch and Toxicology Branch

The Shell Chemical Co. proposes a tolerance of 0.5 ppm for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate (DDVP) from posthervest application on nonperishable bulk stored raw agricultural commodities.

Tolerances have been established on a number of commodities including tolerances of 0.5 ppm and 2 ppm for nonperishable packaged or bagged raw agricultural commodities containing 6% fat or less or more than 6% fat respectively.

#### Conclusions

- 1. We consider the fate of DDVP from the proposed use to be adequately delineated.
- 2. Adequate methods are available to enforce the proposed tolerance.
- 3. Residues from the proposed use will not exceed the proposed tolerance. This is contingent upon the petitioner including the word bulk (nonperishable bulk stored ...) on his label. Additionally, since the term "nonperishable bulk stored raw agricultural commodities" is somewhat indefinite, examples of such commodities should be placed on the label.
- 4. This use falls into Section 420.6(s)(3) regarding secondary residues in meat, milk, poultry and eggs.

#### Recommendation

15 .5

Pharmacological considerations permitting, we recommend for the proposed tolerance. This favorable recommendation is contingent upon the label revisions noted in Conclusion 3 above.

We note that the proposed use could be construed to violate the principle that no more pesticide be used than is necessary to accomplish the intended effect. However, we consider this type of use more closely related to fumigation uses or top dressings in grain bins. The moth problem for which this use is sought results from two basic sources (1) larvae contamination of the grain going into storage of (2) moth and larvae contamination already present in the bin. Therefore the necessity of the treatment could be determined prior to installation of the strips. (Telecon with K. G. Meyers, PRD, EPA, 8/16/71.)

#### Detailed Considerations

#### Pormuletion

Technical DDVP contains 93% 2,2-dichlorovinyl dimethyl phosphate with 7% related compounds.

DDVP is to be formulated as an insecticide resin strip containing 20% DDVP. Each strip weighs 3.7 ozs and is  $10^{\circ}$  x  $2\frac{1}{5}$  in size. Since the inerts do not come into contact with the commodities, they are of no concern from a residue standpoint.

#### Proposed Use

One strip is to be suspended per 1000 cu. ft. of air space over nonperishable stored raw agricultural commodities. The primary purpose is to control moths. The label does not include the term bulk; however, Section F requests the tolerance for nonperishable bulk stored r.a.c.'s. Therefore, the label should specify bulk stored r.a.c.'s. The label states that the strips are usually effective for three months but should be replaced when effectiveness diminishes.

#### Nature of the Residue

The use of Vapona resin strips was discussed in detail in our 2/17/70 review of FAP #0H2477. The resin strips are designed to provide a continuous release of DDVP into the air through volatilization. The concentration of DDVP in air is dependent upon a number of factors, including: number of strips per unit area, age of the strip(s), and environmental conditions (ventilation, temperature, etc.). Data in FAP #0H2477 show that volatilization is greatest immediately after installation of the strips. Commodities will absorb a certain amount of the residues when exposed in areas containing the resin strips.

Residue data were presented for DCA on some food items in FAP #0H2477. Although no DCA analyses were performed in the studies of this petition, we believe that the residue pattern would be similar, i. e., that DCA residues would generally be 10%, or less, of the DDVP residue.

We consider the fate of DDVP from the proposed use to be adequately delineated.

#### Analytical Methods

Most of the data were obtained by cholinestersse inhibition methods. The ChE inhibition methods were based on Shell's enzyme inhibitionspectrophotometric method MS-30/64. This method has been discussed in detail in several previous evaluations. While not specific, the mathod is adequate for obtaining residue dats.

Some data were obtained by method PMS-G-913/69 (this is a refinement of PMS-G-913/68 which was discussed in the 4/22/69 and 9/19/69 reviews of PP #9F0788).

Commodities (including grains, cocos beans, floor, peanuts, etc.) were fortified with DDVP at levels of 0.04-1 ppm with recoveries of 60-120%, with most values in the range of 80-100%. Depending upon the study and method, the blanks ranged from <0.02-<0.1 ppm. (In one study no mention is made as to what method was used, nor was any validation data presented. The claimed sensitivity was reported as 0.5 ppm.)

We consider the methods adequate for obtaining residue deta and the sensitivity of all the methods to be 0.1 ppm or better (except for the one study noted above). We consider the method of choice for enforcement to be the GLC method with thermionic emission detector. GLC methods are also available in PAM II. DDVP will not chromatograph under the GC conditions of the PAM I screening procedure. We consider that adequate methods are available to enforce the proposed tolerance. 7 Now 180.1(m)

#### Residue Data

The petitioner is requesting a tolerance for nonperishable bulk stored raw agricultural commodities. Section #20.1(m) defines nonperishable raw agricultural commodities as any r.a.c. not subject to rapid decay or deterioration that would render it unfit for consumption. Examples given are cocos besns, coffee besns, field-dried beans, field-dried peas, grains and nuts. Not included are eggs,

milk, mest, poultry, fresh fruits and vegetables such as onions, parenips, potatoes and carrots. Commodities not included in the nonperishable list that could be treated include hays, seeds such as gafflower seed, and hops.

Some of the commodities listed may be stored in packaged or bagged form and, therefore, they are presumably covered under the DDVP tolerances for nonperishable packaged or bagged raw agricultural commodities.

Data are presented for a number of commodities; most of the studies are for grains (corn, wheat and sorghum) but data are also available for soybeans, cocoa beans, peanuts and flour (flour is not a r.a.c.).

Resin strips were place in bulk storage facilities such as bins at rates ranging from 1 strip/23ft<sup>3</sup> of overspace to 1 strip/1000 ft<sup>3</sup>. Most of the data reflect at least the proposed use with many of the studies reflecting an exaggeration in the strip installation rate. Sampling intervals ranged from 3 days to several months after strip installation. Most of the data refelct samples taken at 0-2" and 2-4" depths with some of the studies showing samples from 12".

Although the residue pattern is highly variable (as would be expected from this type of use), in general residues are the greatest in the top 2" with some residue in the 2-4" layer and virtually no residue below 6". Additionally, maximum residues seem to occur between the second and fifth week after strip installation.

If we consider all the data reflective of what will occur in actual practice (overspace in storage facilities may not always be calculated before strip installation), only a few show residues greater than the proposed 0.5 ppm tolerance level (up to ca. 0.7 ppm). Even in these studies the 0.5 ppm level is only exceed in the 0-2" layer; if we take a 0-4" layer the tolerance request is never exceeded. Residues in the upper layer would be further reduced due to mixing of the commodity as the storage facility is emptied.

Studies with commodities of greater than 6% fat content show that a higher tolerance level would not be needed as was the case with the use for the bagged commodities. Additionally, processing of some of the commodities such as wheat would further reduce the residue level.

Therefore, we conclude that residues from the proposed use would not exceed the proposed tolerance. (Commodities receiving treatment in storage facilities when bagged after receiving treatment from the bulk storage treatment proposed here would not contain residues in excess of the presently established tolerances for packaged or bagged r.a.c.\*s.) This is contingent upon the patitioner specifing bulk stored commodities on his label. Additionally, since the term nonperishable bulk stored raw agricultural commodities is somewhat indefinite, examples of such commodities should be placed on the label.

#### Mest, Milk, Poultry and Eggs

Some of the commodities (such as corn) are animal feed items. Data in PP #s 9F0788 (DDVP in meat and milk) and 1F1059 (DDVP in poultry and eggs) show that the feeding of items containing 0.5 ppm of DDVP would cause no problem of follow-up residues in meat, milk, poultry or eggs [Section 420.6(a)(3)].

A. R. Rathman Chemistry Branch Pesticides Tolerances Division

cc: Toxicology Branch
CF-30 (FDA)
C. Smith, PRD
C. Lewis, Chamblee
Chemistry Branch
PP #1F1132

ARRathman/erk/August 17, 1971

RD/Init:JWolff;JGCummings 8/3/71 8/17/71

Chimestry for

Washington, D. C. 20250

Pesticides Regulation Division

Box

9-PP-1F1132

Certification of Usefulness Pesticide Petition 1F1132 Drew M. Baker, Jr. BF-320 APR 2 6 1971

8310 BAR 6/11/1/

Jil: PP# 1F1132

We have examined the subject petition and related data proposing a tolerance for the pesticide chemical 2,2-dichlorovinyl dimethyl phosphate of 0.5 part per million in nonperishable bulk stored raw agricultural commodities. This petition was submitted by Shell Chemical Company, and was filed February 11, 1971.

We certify that the pesticide chemical is useful for the purpose for which a tolerance is sought on the above commodities.

Charles L. Smith Head, Petitions Control Section

**প্রা** 

31 idreday, 47 -ch 3/1971

PP#1/32

#### SHELL CHEMICAL CO.

#### Notice of Filing of Petition Regarding Pesticide Chemicals

Pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 408(d) (1), 68 Stat. 512; 21 U.S.C. 346a (d) (1)), notice is given that a petition (PP-IF1132) has been filed by the Shell Chemical Co., Suite 1103, 1700 K Street NW.: Washington, DC 20006, proposing the establishment of tolerances (21 CFR Part 420) for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate in or on nonperishable bulk stored raw agricultural commodities at 0.5 part per million resulting from dispersion of the insecticide from resin strips used in bulk storage areas.

The analytical method proposed in the petition for determining residues of the insecticide is a gas chromatographic procedure with a thermionic detector.

Dated: February 26, 1971.

R. E. JOHNSON,
Acting Commissioner,
Pesticides Office.

1.53

(FR Doc.71-2903 Filed 8-2-71;8:60 am)

#### Pebruary 11, 1971

Posticide Petition No. 171132

Mr. L. E. Mitchell Shell Chemical Company Suite 1103 1700 K Street, NV. Washington, DC. 20006

Poer Mr. Mitchell:

We have your letter of January 7, 1971, transmitting three copies of a patition requesting establishment of telerances for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate in or on nemperishable bulk stored raw agricultural commodities at 0.5 part per million resulting from dispersion of the insecticide from resin strips when used in areas where the commodities are stored. We acknowledge receipt of your check for \$600 which accompanied the petition.

The petition has been designated Pesticide Petition No. IF1132 and it is being filed today. Further action avaits completion of scientific review and evaluation.

Sincerely yours.

Lee B. TerBosh

cc: Posticides Regulation Division, RPA Washington, DC.

cc: BF-320 BF-300 BF-216 BF-148 AA-130 Mr. Sieber, RPA LETerBush:ctb:2/11/71

1200-03/13/

#### PESTICIDE PETITION RESUME

BF-116

Petition No.: 1F1132

Date received: 1-12-71

Petitioner: Shell Chemical Co.

Common name of pesticide: None

Trade name: DDVP (Vapona) (Dichlorvos)

General use: Insecticide

Nautre of request: Establish telerances for residues in or on all

bulk stored R.A.C.'s

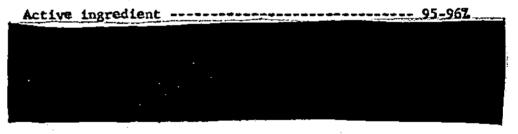
Related petitions: 7F0623, 8F0706, 9F0788, 0E0875, 1F1059, & FAP 0H2477

Section A:

Chemical name: 2,2-dichlorovinyl dimethyl phosphate

Ingredients.

a. Technical product



b. Formulations

Vapona insecticide pest strip (animal health) contains:

Idential to above

#### Page 2

#### Section B:

- 1. How applied suspend 1 strip per 1,000 cubic ft of air space
- 2. Restrictions none indicated

Section C: No new data - but does include a discussion of detoxification in plants and animals.

#### Section D:

- 1. Residue data
  - a. R.A.C.'s stored soybeans, shelled corn, corn, wheat, grain sorghum, cocos beans, flour, and peanuts
  - b. Soil none indicated
- 2. Metabolism studies none indicated
- 3. Analytical method a gas chromatographic procedure using a thermionic detector.
- Section E: Residues in excess of proposed tolerances may be reduced by (1) mixing, since residues occur only in the top 2-4 inches, (2) commercial processing, and (3) washing and cooking.

#### Section F: R.A.C. 's

Proposed Tolerance

NONPERISHABLE BULK STORED raw agricultural commodities

0.5 ppm

Section G: Reasonable grounds in support of the petition

- 1. Effective
- 2. Safe to handlers
- 3. Needed
- 4. Up to 98% of residues is eliminated by washing, cooking, or commercial preparation
- 5. Safe
- 6. Rapid break-down.

Food and Drug Officer: Lee E. TerBush CTB: 2/11/71

Dated: 1-15-71

PP 1F1/32



## SHELL CHEMICAL COMPANY

A DIVISION OF SHELL OIL COMPANY

SUITE 1103 1700 K STREET, N.W.

WASHINGTON, D.C. 20006

TELEPHONE 202 - 296-36

AGRICULTURAL CHEMICALS DIVISION

January 7, 1971

PETITION PROPOSING A TOLERANCE FOR VAPONA® INSECTICIDE IN BULK STORED RAW AGRICULTURAL COMMODITIES

INVEST REGEROURN'S INFORMATION IS NOT INCLUDED

Environmental Protection Agency BF-320, Food and Drug Bldg. 200 C Street, S. W. Washington, D. C. 20204

Attention Mr. F. J. McFarland

Gentlemen:

The undersigned, Shell Chemical Company, submits this petition pursuant to Section 408 (d) of the Federal Food, Drug, and Cosmetic Act proposing a tolerance of 0.5 ppm for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate in or on non-perishable bulk stored raw agricultural commodities. This tolerance level has previously been established for certain raw agricultural commodities as shown in 21 CFR 120.235. This petition simply proposed an expansion of the existing regulation to encompass certain raw agricultural commodities stored in bulk.

The pesticide products proposed for use contain two inert ingredients,

The composition of these compounds is given
in Pesticide Petition No. 1F1059 which is already on file.

Attached hereto in triplicate and constituting a part of this petition are data and information organized in sections (A through G), and titled and indexed as prescribed in Section 408 (d)(1) of the Act.

Our certified check (No. 12-01235) in the amount of \$600 is enclosed to cover clerical operations, initial administrative review, and the cost incurred in considering this petition after it has been filed.

Yours very truly,

SHELL CHEMICAL COMPANY

Digna %: L. E. Mitchell Division Representative

cc: EPA, PRD, South Ag. Bldg.

35, 41



# SHELL CHEMICAL COMPANY

A DIVISION OF SHELL OIL COMPANY

SUITE 1103 1700 K STREET, N.W. WASHINGTON, D.C. 20006 TELEPHONE 207 - 296-363

AGRICULTURAL CHEMICALS DIVISION

January 7, 1971

PETITION PROPOSING A TOLERANCE FOR VAPONA® INSECTICIDE IN BULK STORED RAW AGRICULTURAL COMMODITIES

Environmental Protection Agency Pesticides Regulation Division South Agricultural Building Washington, D. C. 20250

Gentlemen:

Enclosed are three copies of a petition proposing a tolerance of 0.5 ppm for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate (VAPONA® Insecticide) in or on non-perishable bulk stored\_raw agricultural commodities. The pesticide product proposed for use is already registered under USDA Reg. No. 201-136. Copies of the labels showing the new directions for use are being submitted separately with the application for registration.

We request that you furnish a certification of usefulness as required and your opinion whether or not the tolerance proposed reasonably reflects the residue likely to result when the insecticide is used as directed.

Concurrently with this request, we are submitting the petition to the Environmental Protection Agency Office at 200 C Street, S.W., for filing pursuant to Section 408 (d) of the Federal Food, Drug, and Cosmetic Act. A copy of the transmittal letter is enclosed.

Yours very truly,

SHELL CHEMICAL COMPANY

L. E. Mitchell Division Representative

17.43

Enclosures

cc: EPA, BF-320, Food & Drug Bldg. 4-1

40802401 Todhunter, J. (1988) Product Analysis Data and Certification of Limits for Cdf Chimie's Oniachlor 90, Oniachlor 60, Oniachlor EC TICA Granular and SDIC Grandular: Project ID. CDF/PRODANAL.SUB. Unpublished study prepared by Todhunter, Mandava, and Assoc. 46 p.

TRADE SECRET STATUS: 00 TRADE SECRET STATUS DATE:

0

M=GENERAL PURPOSE MENU; D=DISPLAY INDEXING MENU; RETURN TO CONTINUE